LIST OF PRIOR ART CITED BY CONTROL APPLICANT					ATTY. DOCKET NO. FSU-0004		APPLN. SERIAL NO. 09/909,992		<b>A</b> .
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OTHER ART (Including Author, Title, Date, Pertinent Pages, Publisher, Place of Publication, Etc.)									
Sul	Α	S.D. Allen, J.O. Porteus a Appl. Phys. Lett. Vol. 41		•	induced desorption	of H <sub>2</sub> 0 and 1	hydrocarbons f	rom opt	ical surfaces,
W	В	S.D. Allen, J.O. Porteus, W.N. Faith, and J.B. Franck, Contaminant and defect analysis of optical surfaces by infrared laser induced desorption, Appl. Phys. Lett. Vol. 45(9), pp. 997-999 (1984)						infrared laser	
W	С	J.O. Porteus, J.B. Franck, S.C. Seitel and S.D. Allen, Defect characteristics of optical surfaces using pulsed laser damage methods, Optical Engineering Vol. 25, No. 10, pp. 1171-1176 (1986)							
001	D	W. Zapka, W. Ziemlich and A.C. Tam, Efficient pulsed laser removal of 0.2µm sized particles from a solid surface, Appl. Phys. Lett. Vol. 58 (20), pp. 2217-2219 (1991)							
لع	Е	M. Genut, B. Livshits, Y. Uziel, O.Tehar-Zahav, E. Iskevitch, I. Barzilay, Laser removal of foreign materials from semiconductor wafers, Proc. SPIE Vol. 3274, pp. 90-99 (1998)							
<u>س</u>	F	D. Yogev, M. Engel, S. Zeid, I. Barzilay, and B. Livshits, Laser chemical process for clean applications in semiconductor manufacturing, Proc. SPIE 3933, pp. 77-87 (2000)							
en	G	J.D. Kelley, M.I. Stuff, F.E. Hovis and G.J. Linford, Removal of small particles from surfaces by pulsed laser irradiation: observations and a mechanism, Proc. SPIE 1415, pp. 211-219 (1991)							
(h)	Н	Y.F. Lu, W.D. Song, C.K. Tee, D. S-H. Chan, and T.S. Low, Wavelength effects in the laser cleaning process, Jpn. J. Appl. Phys. Vol. 37, pp. 840-844 (1998)							
d	I	V. Dobler, R. Oltra, J.P. Boquillon, M. Mosbacher, J. Boneberg and P. Leiderer, Surface acceleration during dry laser cleaning of silicon, Appl. Phys. A 69, pp. S335-S339 (1999)							
(A)	J	M. She, Dongsik Kim and C.P. Grigoropoulos, Liquid-assisted pulsed laser cleaning using near-infrared and ultraviolet radiation, J. Appl. Phys. Vol. 86, No. 11, pp. 6519-6524 (1999)							
6	K	A. Miller, S.J. Lee, S.D. Allen, Laser assisted particle removal "dry" cleaning of critical surfaces, Mater. Sci. Eng. B49, pp. 85-88 (1997) Author Swife Sw							
الم	L	C.T. Avedisian, The Homogeneous Nucleation of Limits of Liquids, J. Phys. Chem. Ref. Data Vol. 14, No. 3, pp. 695-729 (1985)							
	М	O. Yavas, P. Leiderer, H.K. Park, C.P. Grigoropoulos, C.C. Poon, W.P. Leung, N. Do and A.C. Tam, Optical Reflectance and Scattering Studies of Nucleation and Growth of Bubbles at a Liquid-Solid Interface Induced by Pulsed Laser Heating, Phys. Rev. Lett., Vol. 70, No. 12, pp. 1830-1833 (1993)							
Qu	N	A.C. Tam, H.K. Park and C.P. Grigoropoulos, Laser Cleaning of Surface Contaminants, Appl. Surf. Sci. 127-129, pp. 721-725 (1998)							129, pp. 721-
COP4	0	J.B. Heroux, S. Boughaba, I. Ressejac, E. Saeher and M. Meunier, CO, laser-assisted removal of submission particles from solid surfaces, J. Appl. Phys. 79(6), pp. 2857-2862 (1996)							articles from
&u	P	M. Mosbacher, H-J. Munzer, J. Zimmermann, J. Solis, J. Boneberg & P. Leiderer, Optical field enhancement effects in laser-assisted particle removal, Appl. Phys. A 72, pp. 41-44 (2001)							
EXAM	INER (				ATE CONSIDERE				

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

LIST OF PRIOR ART CITED BY APPLICANT					ATTY. DOCKET NO. FSU-0004		APPLN. SERIAL 109/909,992				
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		OTHER ART (Including Author, Title, Date, Pertinent Pages, Publisher, Place of Publication, Etc.)  D.R. Halfpenny and D.M. Kaner, A quantitive analysis of single pulse ultraviolet dry laser cleaning, J. Appl. Phys. Vol.									
Cul	Q	86, No. 12, pp. 6641-66	646 (1999)						ol. Phys. Vol.		
Copy	R	J.B. Hereux, S. Bougha	ba, I. Ressejac,	E. Sacher and	M. Meunier, J. App	ol. Phys. 79,	p. 2857 (1996	<del>}</del>			
ar /	S	X. Wu, E. Sacher and M. Meunier, The modeling of eximer laser particle removal from hydrophilic silicon surfaces, J. Appl. Phys. Vol. 87, No. 8, pp. 3618-3627 (2000)									
Miggi	9	G. Vereecke, E. Rohr an	nd M.M. Heyns.	Laser-assisted	removal of particle	es on silicon	wafers, J. App	ı <del>l. Phys.</del>	-Vol. 85, No.		
	4.	7, pp. 3837-3843 (1999	VD Song An	anarov annroad	ch to the modelling	of particle	removal by nu	Ised lase	er irradiation.		
a	/U	Y.F. Lu, Y.W. Zheng, W.D. Song., An energy approach to the modelling of particle removal by pulsed laser irradiation, Appl. Phys. A 68, pp. 569-572 (1999)									
C	V	K. Mann, B. Wolff-Rottke and F. Muller, Cleaning of optical surfaces by eximer laser radiation, Appl. Surf. Sci. 96-98, pp. 463-468 (1996)  J. Adler, R.K. Sin, Y. Rabinovich and B. Moudgil, J. Coll. In (2000)									
	₩										
-6	Х	C. Canuto, M.Y. Hussaini, M.Y. Quarteroni, Spectral methods in fluid dynamics, Springer Series in Computational Physics, Springer-Verlag, New York (1988)									
148 14 14 14 14 14 14 14 14 14 14 14 14 14	Υ	Q. Chen, H.W. Lee, S. Allen, Bubble formation and growth in liquid encapsulated laser vapor deposition, Proceedings of the 2nd annual Louisiana Aerospace Forum, 113 (1994)									
Eg/	Z	A.C. Engelsberg, Transition from laboratory to manufacturing for a dry, laser-assisted cleaning technology, SPIE Vol. 3274, pp. 100-109 (1998)									
2		R.G. Horn, and D.T. Smith, Contact Electrification and Adhesion Between Dissimilar Materials, Science Vol. 256, pp. 362-364 (1992)									
حمكم	ВВ	M.Y. Hussaini, P. Rasetarinera, An efficient implicit discontinuous spectral Galerkin method, Journal of Computational Physics Vol. 172, pp. 718-738 (2001)									
SW	CC	K. Imen, S.D. Allen, S. Lee, Laser assisted microscale particle removal, Appl. Phys. Lett. 58(2), pp. 203-205 (1991) 🙇									
MIGG	150_	J.N. Israelachvili, Inter	molecular and	Surfaces Forces	, Academic Press,	London 199	)2	N	# (1(10) ==		
er	EE	S.J. Lee. K. Imen, S.D. Allen, CO <sub>2</sub> Laser assisted particle removal threshold measurements, Appl. Phys. Lett. 61(19), pp. 2314-2316 (1992)									
101	FF	S.J. Lee, K. Imen, S.D. Allen, Shock wave analysis of laser particle removal, J. Appl. Phys. 74(12), pp. 7044-7047 (1993)									
Miss	CS_	S.J. Lee, S.D. Allen, S. Miller, Materials Science and Engineering B 49, p. 85 (1997)									
6 m	НН	P.T. Leung, N. Do, Leander Klees, W.P.Leung, Frank Tong, L. Lam, W. Zapka and A.C. Tam, Transmission studies of explosive vaporization of a transparent liquid film on an opaque solid surface induced by excimer-laser-pulsed irradiation, J. Appl. Phys. 72 (6), pp. 2256-2263 (1992)									
(W	II	induced thermal expan	K. Lu, W.D. Song, K.D. Ye, Y.P. Lee, D.S.H. Chan and T.S. Low, A cleaning model for removal of particles due to laser duced thermal expansion of substrate surface, Jpn. J. Appl. Phys. Vol. 36, pp. L1304-L1306 (1997)								
Co	JJ	Y.K. Lu, W.D. Song, Y. Zhang, M.H. Hong, T.S. Low, A theoretical model for laser removal of particles from solid surfaces, Applied Physics A 65, pp. 9-13 (1997)							les from solid		
EVAMINER		DATE CONSIDERED									

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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		OTHER ART (Including	ς Author, Tit	le, Date, Pertine	ent Pages, Publisher	, Place of	Publication, F	tc.)		
(A)	KK	Y.K. Lu, Y.W. Zheng, and 87, No. 3, pp. 1534-1539	W.D. Song, l (2000)	Laser induced re	moval of spherical p	articles fro	om silicon wafe	rs, J.App		
التفك	LL	M. Meunier, J.B. Heroux, S. Boughaba, E. Sacher, CO <sub>2</sub> laser assisted removal of sub micron particles from solid surface, J. Appl. Phys. 79 (6), pp. 2857-2862 (1996)								
and	MM	M. Mosbacher, N. Chaoui, J. Siegel, V. Dobler, J. Solis, J. Boneberg, C.N. Afonso, P. Liederer, A comparison of ns and ps steam laser cleaning of Si surfaces, Appl. Phys. A 69, pp. S331-S334 (1999)								
(EN)	NN	M. Mosbacher, V. Dobler, J. Boneberg, P. Liederer, Universal threshold for the steam laser cleaning of submicron spherical particles from silicon, Appl. Phys. A70, pp. 669-672 (2000)								
MISS	103	-K.L. Mittal, Particles on s	surfaces Vol.	1-6, Plenum Pre	ss New York (1988-	<del>1998)</del>				
0	PP	H.K. Park, C.P. Grigoropoulos, W.P. Leung, A.C. Tam, A practical excimer laser-based cleaning tool for removal of surface contaminants, IEEE Transactions on Components, Packaging and Manufacturing Technology - Part A, Vol. 17, No. 4, pp. 631-643 (1994)								
(av)	QQ	N.W. Pu, J. Bokor, S. Jeong, R. Zhao, Nondestructive ps-ultrasonic characterization of Mo/Si extreme UV multiplayer reflection coatings, J. Vac. Sci. Technol. B17 (6), pp. 3014-3523 (1999)								
SW	RR	A.C. Tam, W.P. Leung, W. Zapka, W. Ziemlich, Laser-cleaning techniques for removal of surface particles, J. Appl. Phys. 71 (7), pp. 3515-3523 (1992)								
Cu	SS	O. Yavas, A. Schilling, J. Bischof, J. Boneberg, P. Leiderer, Bubble nucleation and pressure generation during laser cleaning of surfaces, Appl. Phys. A, 64, pp. 331-339 (1997)								
SW	TT	S. Miller, Dusty Lab May Revolutionize LEDs, Photonics Technology World, p. 34, September 2000								
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